# Systems Thinking in Upstream Social Marketing: Using Soft Systems Methodology to Improve Midwifery Policy in Jordan

*Article*

Social Marketing Quarterly
2020, Vol. 26(2) 167-183

DOI: 10.1177/1524500420925810
journals.sagepub.com/home/smq


# Systems Thinking in Upstream Social Marketing: Using Soft Systems Methodology to Improve Midwifery Policy in Jordan

**Houda A. Khayame[1] and Mona M. Abdeljawad[2]**

## Abstract

**Background:** Despite being acknowledged worldwide as essential maternal care providers, midwives remain marginalized in the Jordanian healthcare system. Further, considering Jordan's goal to achieve a total fertility rate of 2.1 by 2030 and Jordanian women's preference for female providers, enhancing midwives' role could significantly promote the use of reproductive health and family planning services.
**Focus of the Article:** We report on opportunities created by opening the boundary of our social marketing understanding to systems thinking in practice (STiP), using soft systems methodology (SSM) to engage with the complex situation of midwifery policy in Jordan.
**Research Question:** In what ways could STiP benefit upstream social marketing interventions? We attempt to answer this question from the perspective of an SSM action research in Jordan.
**Program Design/Approach:** The intervention combines stakeholder analysis and evidence-based policy with an SSM seven-stage cycle. We analyze the compatibility of SSM with social marketing through the NSMC's eight benchmark criteria.
**Importance to the Social Marketing Field:** The case offers to learn experientially about the relevance of a systems' approach to complement social marketing frameworks. Drawing from the practical application of SSM, this study suggests that using systems' tools in social marketing interventions might significantly contribute to achieving intended behavioral outcomes.
**Methods:** Gordon's alternative framework for upstream social marketing, "advocacy, relationship building and stakeholders' engagement," was enacted through the SSM's seven stages. Research findings provided advocacy arguments. Rich pictures, conceptual modeling, and the CATWOE exercise fostered relationship building and stakeholders' engagement toward the accommodation stage.
**Results:** At the systematic level, that is, the linear chain of programmatic activities, the policy objective was achieved with an amended Law submitted to the Parliament for debate. At the systemic level, that is, the dynamic relationships among stakeholders, the social learning that emerged during the SSM process reduced policymakers' resistance and fostered their collective action.

[1] The Open University, Milton Keynes, United Kingdom
[2] Abt Associates, Inc., Rockville, Maryland, USA

**Corresponding Author:**
Houda A. Khayame, The Open University, Milton Keynes MK7 6AA, United Kingdom.
Email: houda.khayame@open.ac.uk

**Recommendations for Research or Practice:** Social marketers can benefit from further experimentation with systems' approaches to develop their STiP capabilities. Thus, social marketing practice, at this historical moment, could be better equipped conceptually and practically to manage for the emergence of positive behavior change in messy upstream situations where policy and politics are always enmeshed.
**Limitations:** SSM calls for several iterations until stakeholders feel that no more change is needed. However, these iterations are challenging to implement during the limited time frame of development projects. In this case, another iteration was suggested to diffuse the conflict between midwives and obstetrician-gynecologists who saw themselves as victims of this policy reform. However, with Jordan Communication Advocacy and Policy ending in December 2019, this case legacy might be passed on to other projects.

**Keywords**
midwifery practice, upstream social marketing, soft systems methodology, policy change, Jordan

## Introduction

French (2014) defined the concept of upstream social marketing as "policy formulation, and prioritization, budget allocation and influence on strategy" but clarified that "what constitutes its activity is not well articulated" (LinkedIn). Indeed, while a body of literature confirms the significance of upstream social marketing to foster structural change (e.g., French & Gordon, 2015), answering the "how" question is still work in progress. For example, Gordon (2013) discussed the limitations of the traditional product–price–place–promotion (4Ps) strategies and suggested alternative frameworks such as "advocacy, relationship building and stakeholder engagement" (p. 1541).

The relatively recent integration of systems thinking in the practice of social marketing has confirmed that "social marketing is a rapidly developing field in terms of both its practice and its theoretical base" (French, 2011, p. 155). Domegan and Brychkov (2017, p. 74) identified the period of "deep integration of social marketing and systems" from the 2000s to the present. Kennedy (2016, p. 354) coined the concept of "macro-social marketing" that "seeks to use social marketing techniques in a holistic way to effect systemic change," and Varrica (2017) discussed the relevance of systems thinking in social marketing to address the complexity of multiple, interrelated causes of behavior.

Thus, systems thinking appears relevant to the complexity of policymaking environments. Policymaking involve stakeholders with conflicting purposes, and power dynamics are pervasive, often raising questions of ethics. In a Jordanian public health context dominated by male physicians, improving midwives' status raises antagonistic interests and political tensions. Reflecting on Rittel and Weber's (1973) neologism of "wicked problems" (p. 155), Ison, Collins and Wallis (2015) highlight the importance of "avoiding treating [them] as tame," that is, trying to solve them with simple fixes and needing to engage with "a second generation systems approach" (p. 108) using conversations among stakeholders to foster a critical reflection around their own ways to frame the problem. Checkland and Poulter's (2010) soft systems methodology (SSM) is such approach that we further describe in the Method section.

This study analyzes the use of SSM in a social marketing intervention to change midwifery policy in Jordan. It offers an experiential learning from systems thinking in practice (STiP) through the practical use of a systems' approach in a context of upstream social marketing.

## Jordan Context

The World Health Organization (WHO, 2020) acknowledges the essential role of midwives as frontline service providers for primary healthcare and the International Confederation of Midwives (2011)

includes a large array of reproductive health and family planning (RH/FP) services in the scope of midwifery practice. However, the role of midwives in Jordan to provide maternal and childcare is limited, and despite their number increasing from 1,455 in 2013 to 3,606 in 2017 (Jordan Ministry of Health [MOH], 2017), a shortage of qualified midwives persists, especially in remote rural areas. Additionally, a United Nations Fund for Population Activities (UNFPA, 2014) report highlights that midwifery is perceived as the least attractive profession in Jordan.

The Jordan Population and Family Health Survey (JPFHS) indicates that the number of deliveries under medical supervision reached 99% in 2017 (Jordan Department of Statistics [DOS], 2017–2018, p. 146), which might reveal an overmedicalization of maternal care. Indeed, according to Rifai (2014, p. 195) "Cesarean deliveries nationally in Jordan have increased to 30%, including substantial increases among births that are likely low risk for Cesarean delivery for the most part. This level is double the threshold that WHO considers reasonable." Further data from the JPFHS (Jordan DOS, 2017–2018, p. 148) showed that the cesarean section (C-section) rate for all births was 26%: For 20% of births, the decision to deliver by C-section occurred before the onset of labor pains, while for 6% of births, the decision was made after the onset of labor. The comparatively high ratio of planned to unplanned C-sections may indicate that a large proportion of C-section deliveries were not required or necessary. Moreover, Jordan suffers a shortage of specialist doctors in the public sector, especially in rural areas: four populated governorates (Zarqa, Mafraq, Jerash, and Ajloun) fall short of the physician density average of 4.2 per 10,000 citizens (Jordan MOH, 2017).

In this context, shifting the mother and child healthcare paradigm toward a midwife-led model would foster competent and empowered midwives who can play a pivotal role in helping Jordan improve its maternal and child health indicators. Further, considering Jordan's goal to achieve a total fertility rate of 2.1 by 2030 and Jordanian women's preference for female providers, enhancing the role of midwives could significantly promote the use of RH/FP services. Therefore, the USAID Jordan Communication Advocacy and Policy (JCAP) project team has engaged in an SSM cycle for a policy change process since December 2016 in order to improve midwifery legal status and clinical practice.

## Objectives

At the intervention level, the objectives of the SSM cycle were to (1) understand the professional, educational, and legal barriers to the midwifery practice; (2) assess the strengths and weaknesses of the Midwifery Law #7 for the year 1959 (Government of Jordan, 1959); (3) build constituency for the required legal amendments; and (4) advocate for government buy-in and submission of an amended midwifery law to the Parliament.

At the situation level, the objectives of the SSM cycle were to (1) foster a collaborative behavior in a situation permeated with conflicting social, economic, and political interests and characterized by power struggles; and (2) to improve the situation toward a conducive environment for the amended midwifery legislation.

## Method

### *Situation Analysis*

A secondary review of the following research reports addressed the first two intervention's objectives: A legal assessment of the Midwifery Law #7 for the year 1959 (JCAP, 2017a) highlighted the legal barriers to midwifery practice. A situation analysis of the midwifery profession in Jordan (JCAP, 2017b) used a literature review, interviews with 21 representatives from 15 organizations that either employ or train midwives; and three focus groups with a convenient sample of 19 midwives from public hospitals in the North, Centre and South regions, the United Nations Relief and Works Agency (UNRWA), and two

private maternity hospitals. The situation analysis provided insights about actual midwives' practices and gaps with the scope of practice in the current Law. An appraisal of midwifery education (JCAP, 2017c) was conducted through key informant meetings with deans and academic teams of the University of Jordan, Jordan University of Science and Technology, Hashemite University, Rufeida Al-Aslamiya College for Allied Health, and Princess Muna Nursing College. It clarified the current midwifery curriculum and probed universities' readiness to create new faculties to improve qualifications. A study of gender determinants and social and cultural barriers affecting women's access to RH/FP services (JCAP, 2015) provided information about women's preferences regarding service providers, and a literature review of midwifery legislations in the United States, France, the UK, and New Zealand (JCAP, 2018) helped benchmark Jordan's midwifery legislation and identify models of good policy and practice.

## *Stakeholder Analysis*

The situation analysis of the midwifery profession in Jordan (JCAP, 2017b) included interviews with representatives of the organizations involved in the legal amendment process, that is, MOH, Royal Medical Services (RMS), Jordan Nursing Council (JNC), Jordan Nurses and Midwives Council (Syndicate), and Jordanian Society of Obstetrician-Gynecologists (JSOG) to understand their institutional stakes in changing the midwifery policy and their worldviews about improving midwifery practice.

## *Participatory Approach*

This policy intervention placed midwives at the center of policymakers' considerations, not only as beneficiaries but also as agents of change in the maternal care landscape. Their active participation throughout the process helped maintain focus on midwives' needs and circumstances. During a series of workshops, 60 midwives discussed and validated the findings and recommendations of the situation analysis (JCAP, 2017b) and participated in the drafting of the amended law, identifying core issues, and refining consecutive drafts. When the Legislative Bureau published the final drafted law on its website, the Syndicate solicited the broader community of midwives to comment online and ensured that midwives' views were considered.

## *SSM Seven-Stage Cycle*

SSM is

> an action-oriented process of inquiry (. . . ) in which the situation is explored using a set of models of purposeful action (each built to encapsulate a single worldview) to inform and structure discussion about how it might be improved (. . . ) SSM is a process of seeking accommodations between different worldviews, it is a process of finding versions of the to-be-changed situation which different people with conflicting worldviews could nevertheless *live with*. (Checkland & Poulter, 2010, pp. 191, 193)

SSM supported the design of a systemic co-inquiry (Ison, 2017, p. 253), that is, a "social learning . . . understood as a concerted action by multiple stakeholders in situations of complexity and uncertainty."

## *Institutional Setting for SSM Application*

A National Committee (the Committee) chaired by JNC to promote the role of midwives in Jordan was created in December 2016 as an institutional mechanism to enact the SSM process toward the third and fourth intervention's objectives. During the SSM cycle, the Committee was the "place" of relationship building and stakeholders' engagement through a social learning process aiming to change their behavior.

## Limitations

Regarding the improvement of the problematic situation, SSM rich pictures and conceptual modeling supported the collective acknowledgment of each stakeholder's worldview, and the accommodation stage helped reduce the initial political tensions. However, the problematic situation of midwifery practice in a medically dominated paradigm is deeply ingrained. Thus, to sustain the situation's improvement gained during this SSM cycle, further STiP efforts would be needed, for example, using other SSM iterations. This is challenging within the limited timescales of the project.

The next two sections offer insights on audience segmentation and competition from the stakeholder analysis, then the SSM cycle is presented. A discussion on the SSM's adaptability to the eight benchmark criteria for social marketing (National Social Marketing Center, [NSMC] n.d.) and an evaluation of its behavioral performance come next. The final section provides our main conclusions and insights about the contribution of systems tools in enhancing the emergence of behavior change and systems thinking in supporting the sustainability of social marketing practice.

## Segmentation: Stakeholder Analysis

As social marketers, analyzing stakeholders' purposes and intentions was important "to know our audience." As SSM practitioners, the stakeholder analysis supported our learning about the histories underlying their worldviews. These insights also helped carrying SSM's "analysis three: political" which focuses on "finding out the disposition of power in a situation and the processes of containing it" (Checkland & Poulter, 2010, pp. 216–217). Thus, understanding the politics at play could support the accommodation of different interests that "will never go away" (p. 217) throughout the process.

The *MOH* is the second largest employer of midwives after private sector hospitals and grants midwives' licenses. The MOH relies on midwives to provide RH/FP services in primary healthcare centers, albeit under doctors' supervision while conducting normal deliveries and carrying out intrauterine device (IUD) procedures. While acknowledging the importance of midwives' role in RH/FP service provision, the MOH management structure reflects a national physician-led model where prenatal, neonatal and postnatal care, and managing normal deliveries are viewed as medical prerogatives. However, the Directorate of Nursing act as an engaged stakeholder inside the MOH to advocate for the value of an amended law among their colleagues in other departments led by doctors.

The *RMS* are politically influential and represent a normative institution in the Jordanian medical environment although representing a small part of RH/FP services country-wide. Their model for RH/FP is also physician-led. However, RMS have demonstrated an openness to enhancing midwives' roles, as long as their responsibilities were clearly defined and legally binding, and that their clinical competencies were academically and practically established. The RMS took an important step by endorsing the Minister of Health decree allowing trained midwives to conduct IUD procedures without medical supervision.

The *JNC* was established in 2002 with the mission of enhancing nurses and midwives' accountability and professionalism. In 2016, the JNC developed the *Midwifery Scope of Practice, Professional Standards and Competencies' Framework* (Jordan Nursing Council, 2016a) and the Bylaws #85 for the year 2016 (Jordan Nursing Council, 2016b) that create the system of specialization and technical classification in the profession of nursing and midwifery. However, in the absence of a legal backup in the current law and a poor educational system for midwifes, the competency-based framework was not adopted nationally and the classification of the midwifery profession was not enacted. The JNC was supportive of amending the midwifery law in order to enact these institutions.

The *Syndicate* have the mandate to protect the professional rights of their members. Midwives are required to register in the Syndicate to ensure that they are treated without discrimination. The Syndicate promotes midwives' right to conduct normal deliveries without medical supervision, to independently admit mothers into hospitals, to receive an equitable remuneration, and to co-design a

referral system with gynecologists based on defined roles and responsibilities in handling deliveries. The Syndicate's role was essential in mobilizing midwives' constituency and making sure their voices were heard. Hence, borrowing a Critical Systems Heuristics (CSH) concept, they acted as a "source of legitimacy" as they were "representing the interests of those . . . not [directly] involved in [the law amendment process]" (Ulrich & Reynolds, 2010, p. 244).

The *JSOG* view that delivering babies is solely within the mandate of obstetrician-gynecologist physicians. Their argument is that midwives are currently not equipped with the knowledge and skills to detect complications, and the time lag of calling-in a doctor is risky for the mother. The JSOG also reject the idea that specialized midwives can practice their profession independently. From a CSH perspective, gynecologists are the "victims" of the "ought to be" midwife-led system as their interests would be negatively affected by a law assigning part of their practice to midwives. The JSOG were included in the Committee membership and were invited to the meetings. However, they were not represented in any of the Committee sessions. We discuss further the consequences of JSOG self-exclusion from the SSM process.

## Competition Analysis

This body of research provided an understanding of the legislative, educational, and practice gaps in the midwifery profession in Jordan compared to international midwifery standards. Findings indicated a dominant physician-led model in Jordan where the obstetrician or another doctor is the lead professional for maternal healthcare. Midwives might be alternative providers but only under a physician's supervision.

Alternatively, research showed that women and infants benefit more from a midwife-led model based on continuity of care from initial prenatal care until the early days of parenting. For instance, women were less likely to have an epidural, episiotomy, or instrumental birth when attended by a midwife. These findings were presented to stakeholders as evidence supporting a midwife-led model. However, medical representatives viewed women's well-being as a lesser priority than what they framed as "medical safety" during delivery.

In the current context, obstetrician-gynecologists appear as midwives' competitors. In a letter dated October 13, 2018, addressed to the Secretary General of JNC (Jordan Nursing Council, 2018), the President of JSOG expressed their rejection of the amended clauses stipulating midwives' capacity to provide the full range of reproductive healthcare, register birth, deliver outside hospitals, and open independent clinics. JSOG's central argument was the risk of endangering mothers and new-borns' lives, thus revealing their view that midwives lacked necessary competence. However, JSOG did not consider the other clauses in the amended law aiming at strengthening midwives' education and clinical capacities.

Alternatively, the analysis of midwives' delivery practice has shown that many midwives often perform autonomously, but doctors' names are registered on the birth certificates delivered by the hospital. Midwives also perform deliveries without medical supervision in rural areas where there are no doctors. Nevertheless, it appears that insufficient education and unclear roles remain important competitive disadvantages for midwives (JCAP, 2017b). Furthermore, although education and a referral process are included in the amended law, the necessary changes in the education and health systems to implement such policies are not likely to happen fast.

Stakeholders' history, competing agendas, and institutional limitations are meta-issues that transcend the "problem" of amending the midwifery law. Thus, expanding the boundary of the first-order policy intervention—that is, law amendment—to consider the institutional environment and the political dynamics ruling stakeholders' relationships was an essential part of the SSM process described below.

## SSM Seven-Stage Cycle

### *Stage 1: Identifying a Problematic Situation*

In 2016, the Minister of Health issued a decree allowing public sector midwives to perform IUD procedures without medical supervision, but the decree was inconsistently applied. The Committee "took a [systemic] design turn" (Ison, 2017, p. 269) by considering the whole midwifery system and raised issues related to legal impediments including poor education, insufficient clinical training, and doctors' power over midwives. Thus, JCAP and JNC teams facilitated the Committee's efforts through an SSM cycle to embrace the situation's complexity, acknowledge multiple worldviews, facilitate the accommodation of worldviews, design an activity model that is desirable and feasible for policy improvement, and implement policy change actions (Figure 1).

### *Stage 2: Problematical Situation Expressed (Rich Picture)*

Rich pictures are recommended at this stage as they help visualize interacting relationships, stakes at hold, and emotions involved. Figure 2 highlights two dimensions that are characteristic of all problematical situations according to Checkland and Poulter (2010, p. 192): actors with "different [and rather conflicting] worldviews" about the role of midwives and who will try "to act purposefully," that is, "with intention" in the policy change process.

Like other types of diagrams (e.g., spray diagrams, systems maps, cognitive maps), rich pictures help visualise links between different factors, see emerging issues and foster creative thinking towards possible solutions. From a behavior change perspective, rich pictures are useful to overcome communication barriers e.g. social and cultural differences. They act as enablers for dialogue and mutual understanding among stakeholders with different worldviews.

### *Stage 3: Formulating Relevant Systems*

At this stage, stakeholders' views translated into purposeful systems—or conceptual models—where the purposes assigned to the suggested models reflected their respective intentions. For example, MOH and RMS doctors proposed models to improve clinical practice, and representatives of the Syndicate required models to grant the protection of midwives' legal and social rights. To help stakeholders formulate "root definitions" that are the essences of the processes implied by the relevant system to improve the situation (Checkland & Poulter, 2010, pp. 219–224), JCAP shared the findings of the situation analysis and the midwifery legislation review. The CATWOE checklist recommended by Checkland and Poulter (2010, pp. 220–221) was adapted below to guide the writing of a root definition:

| | | |
|---|---|---|
| C | Customers of the system | Midwives and ultimately women are "those who are on the receiving end of whatever it is that the system does" (OU, 2012). Women prefer female medical professionals but have minimal access to female physicians in rural areas. Midwives conduct normal deliveries in MOH hospitals under medical supervision but without taking credit or financial incentives. Tasks such as IUD insertion were added to midwives' job description but without salary compensation. In theory, midwives are allowed to conduct normal deliveries and insert IUDs under medical supervision, but in reality midwives practice independently without being recognized. Midwives expect their technical competencies, career development and social status to be enhanced. |

*(continued)*

| | | |
|---|---|---|
| A | Actors | Institutional actors (MOH, JNC, RMS, Syndicate, Universities, and Parliament) are the individuals and groups who will carry out the activities envisaged in the relevant policy change system. They are supported by policy champions, e.g., a member of the Senate and a national advocacy figure for women's rights. |
| T | Transformation process | The stakeholders agreed that shifting power dynamics from physicians to midwives is the core part of the transformation process to improve maternal and child health services. Amending the law, which subsumes by-laws and instructions, provides the legal backup necessary to trigger this shift. Further, the law can encompass diverse areas addressing the need to enhance midwives' professional status such as education. |
| W | Worldviews | The Worldviews that guided and informed the selection of the relevant system saw midwives as essential but underutilised human resources to help increase women's access to cost-effective and high quality RH/FP services. The JNC adopts the IMC scope of practice where midwives practice independently, although this definition is not enshrined in national legislation. The worldview of gynecologists is that Jordanian women favor the physician-led model, and that midwives are not qualified enough to detect complex cases independently. Alternatively, a recent law on Health and Medical Accountability (Government of Jordan, 2018) has challenged doctor's token 'supervisory role' as doctors would be held accountable for malpractice even for acts performed by midwives on their behalf. Hence, it was assumed that gynecologists' worldviews would support a law clarifying roles and responsibilities between them and midwives. |
| O | Owners | These are the gatekeepers of the transformation process, who could either foster or impede the policy intervention. Owners vary according to the stages of the policy change cycle. The main gatekeeper at the initial stage was the JNC, who made the case for the shift to a midwife-led model. The JNC engaged allies including the Syndicate, the RMS, influential experts from Jordanian universities and the MOH Director of the Nursing Department. In the second stage of amendments' drafting, the JNC yielded its leadership to the Minister of Health who formed an enlarged national committee under the leadership of the MOH. In the parliamentary stage, the Syndicate took over the process leadership. |
| E | Environmental constraints | The relevant system for policy change would mainly face political challenges in terms of power dynamics between groups seeing midwives' empowerment as necessary for women's health, groups seeing it as a threat to the quality of maternal care and others seeing it as a loss of professional power and financial income. Moreover, the perception of midwifery as the least appreciated healthcare profession in Jordan reflects a low social status for midwives, which represents a barrier to their enhancement in the Jordanian healthcare system. |

The Committee sessions were the space where we facilitated conversations about the relevance—complete or partial—of the different models to improve midwifery policy and practice, with the purpose to reach an accommodation stage around a common conceptual model. These were spaces of negotiation and brokering to diffuse conflict and transform resisting into "non-opposing" behaviors toward the systemic changes that the amended law would bring.

Thus, reaping the fruit of the accommodation process, we could formulate the root definition of a relevant system as "A legal amendment that supports a midwife-led model defining midwives' role, setting mandatory education and training standards, and providing a legal protection to the midwifery practice."

## *Stage 4: Designing a Conceptual Model*

The conceptual model frames the activity chosen to improve the problematic situation. The root definition led to the activity model designed in Figure 3, where the law amendments were the outcomes of several iterations that were debated during the Committee meetings.

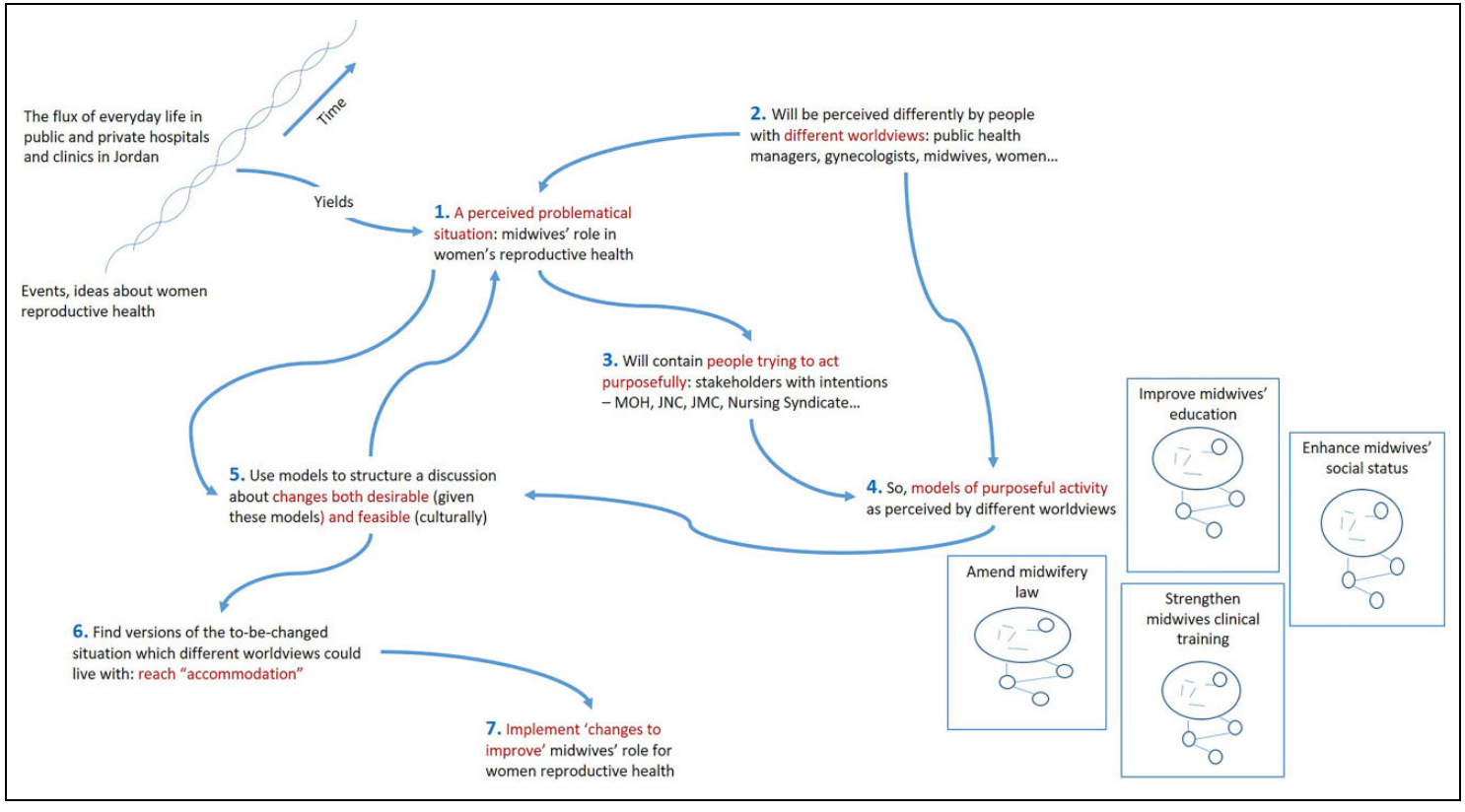


**Figure 1.** Soft systems methodology's cycle of learning for action to improve midwifery policy (adapted from Checkland & Poulter, 2006).

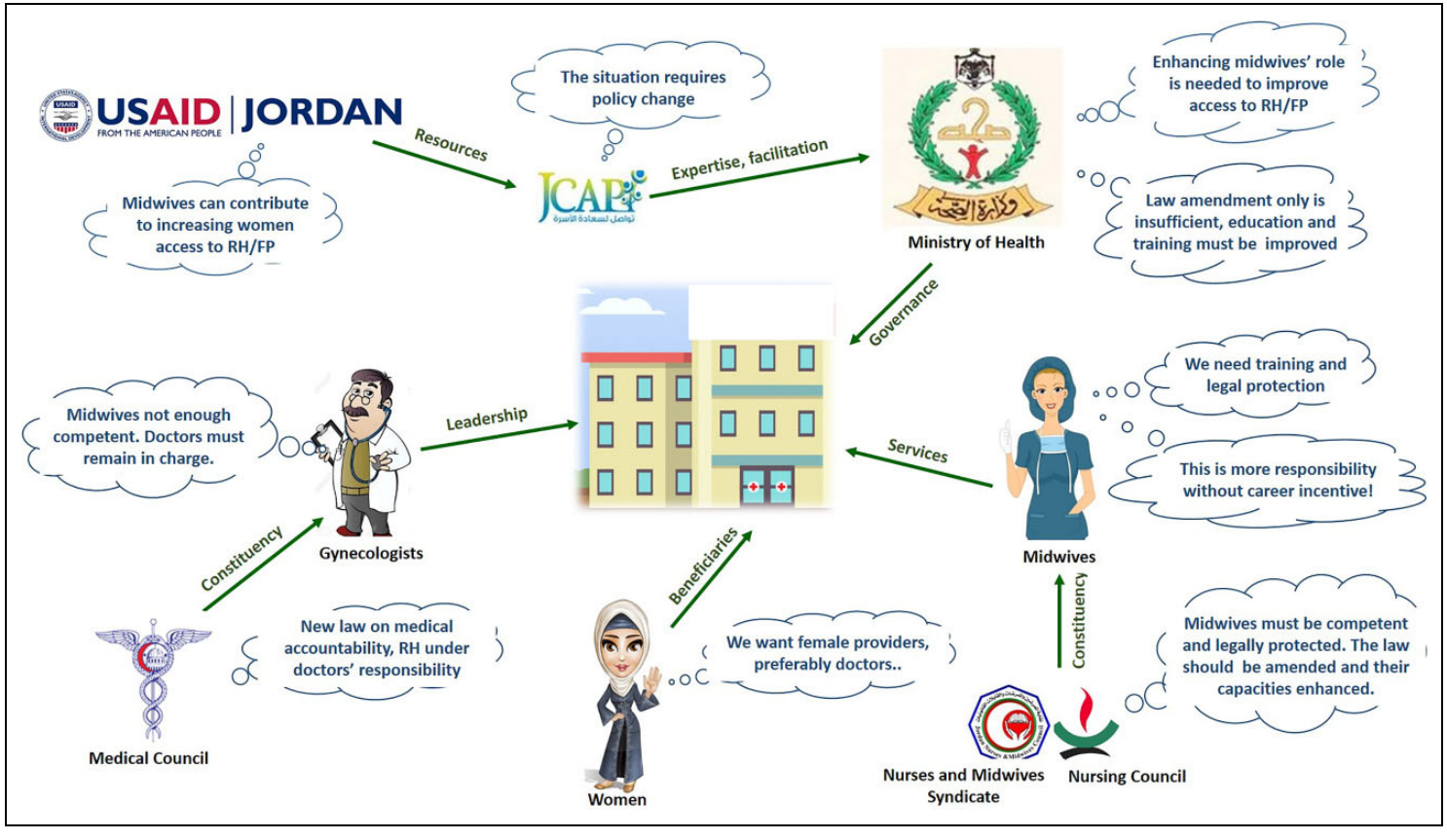


**Figure 2.** Rich picture: Stakeholders' views on midwives' role in the provision of women reproductive health and family planning services.

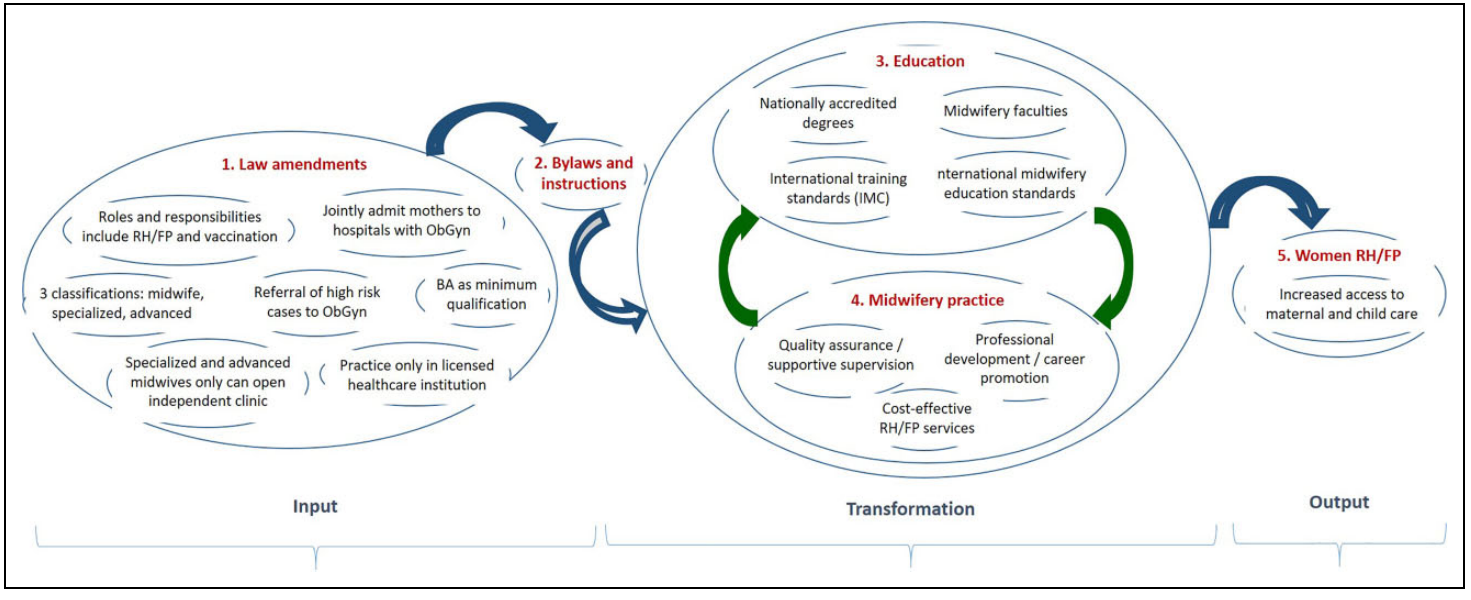


**Figure 3.** Policy Change as a Relevant System to Improve Midwifery Practice and Women reproductive health and family planning healthcare.

## *Stage 5: Comparing Model and Real World*

This stage is the "reality check" of the conceptual model. The midwife-led model undertakes that midwives are qualified and have the basic competencies to assume their professional responsibilities independently. However, the majority of midwives do not have a Bachelor's degree (Abushaikha, 2006), and there is no referral system that clearly frames midwives' acts in relation to obstetricians. Considering the fundamental element of midwives' education, the consultation meetings with universities assessed the potential for introducing midwifery programs qualifying for bachelor's and master's degrees (JCAP, 2017b.)

This research revealed a scarcity of qualified faculties to teach undergraduate programs. Discussions with the Ministry of Education leadership (JCAP, 2017b) also highlighted a major funding issue as developing new curricula and hiring qualified educational teams, perhaps including expatriate professors from Europe or the United States, was far beyond the Ministry's budgetary capacity. This "reality check" between the ideal model and the real world was translated into "more realistic" implementation considerations, such as starting with piloting universities and seeking donor funding rather than pursuing a national model involving numerous universities and using government funding.

## *Stage 6: Agreeing on Systemically Desirable and Culturally Feasible Changes*

Stakeholders except the JSOG agreed on adopting the midwife-led model and drafted the law amendments following an interactive consultation process to accommodate conflicting worldviews about midwives' roles. Despite setting a bachelor's degree as a prerequisite for midwifery practice, the amended law allowed midwives who are currently in practice to continue regardless of their qualification level. It also provided time for engaged universities to create a midwifery program leading to the bachelor's degree starting 2023. The amended law instructed the creation of by-laws defining a referral system between doctors and midwives and created a career path for specialized and advanced-specialized midwives who would be allowed, with adequate experience, to open an independent practice. The issue of allowing midwives to perform normal deliveries independently that was contested by private physicians was seen desirable by governmental stakeholders given the enactment of the medical accountability law.

## *Stage 7. Taking Action, Systematic Planning*

| | |
|---|---|
| • Political ownership and leadership | February 2018: The Minister of Health chaired and enlarged the Committee membership. |
| • Building constituency | July 2018: A midwifery national validation workshop gathered over 100 participants, mostly midwives, to present the results of the situation analysis of midwifery in Jordan and the legal analysis and agree on desirable and feasible changes to improve the situation of the midwifery profession in Jordan. The participants validated the shift to a midwife-led model and the law amendments. |
| • Fostering policy change process | August 2018: USAID, the Prime Ministry and the Minister of Health approved updating the midwifery law as a Condition Precedent for direct assistance funding. |
| • National Committee adopting the law amendments | October 2018: A consultative workshop gathered 64 participants to discuss the amended articles. The National Committee adopted the final draft of the amended law with the reservations of the Jordanian Society of Obstetrician-Gynaecologists and the Private Hospitals Society. |
| • Minister of Health approval | November 2018: The Minister of Health transferred the amended Midwifery Law # 7 for the year 1959 to the Prime Minister. |

*(continued)*

| | |
|---|---|
| • Amended law endorsed by the Legislative Bureau | January 2019: A Cabinet resolution was issued to transfer the amended midwifery law to the Legislative Bureau that endorsed the amendments for submission to the Parliament. |
| • Parliamentarian debate | April 2019: The Parliament transferred the law to the Parliamentarian Population, Health and Environment Committee. The Committee held two debate sessions between representatives of obstetrician-gynecologists and midwives. The committee approved the updated law except for the article allowing midwives to have an independent practice. The Parliament Committee decided to postpone the resolution of the debate until the session due in November 2019. |

**Table 1.** Compatibility of SSM and social marketing interventions using NSMC's eight benchmark criteria (n.d.).

1. Behavior
The intervention went beyond improving knowledge, attitudes and beliefs to focus on specific behaviors, that is, changing some of the Committee members' resistance to allow amendments of the law that "they could live with."

2. Customer orientation
The intervention focused on two audiences: (1) policy decision makers and (2) policy beneficiaries, both first-level beneficiaries, that is, midwives, and end beneficiaries, mothers and infants. Both groups were involved in co-designing the amended law.

3. Theory
The intervention's context was the "Enabling Environment" at the "Policy/Legislation level" as designed in the socio-ecological model of change developed by C-Change (n.d.). This resonates with the classic work of Donella Meadows in her places to intervene in a system, notably the level of the "mind-set or paradigm out of which the goals, rules, and feedback structure arise" (Ison, 2017, p. 76). Kurt Lewin's theory of action research (Adelman, 1993) has also underpinned the process, with learning outcomes that influenced motivations and norms among stakeholders and the ability to act among midwives.

4. Insight
Interviews and Committee conversations offered insights about policymakers and experts' views about midwifery policy and practice. Stemming from Chambers' principle that participatory approaches should empower vulnerable communities (1997), midwives' engagement through focus groups and online forums gave them voice as they lacked the institutional power that a national midwives' association—yet to be created—would have granted them.

5. Exchange
The government's economic and political benefits from improving midwifery policy have been clearly articulated, for example, expanding access of women in rural areas to either free public or affordable private reproductive health and family planning services. Alternatively, gynecologists' intended disengagement hindered a possible exchange based on the law on medical accountability that could have been an incentive to let midwives officially assume responsibility for deliveries they were performing under medical cover.

6. Competition
With the influx of Syrian refugees, the MOH priority to extend the capacity of public health services was higher than improving the midwifery system. Alternatively, the JNC and the Syndicate positioned the amended midwifery law as a contribution to this higher priority. The JSOG agenda was overtly competing with the intervention's purpose.

7. Segmentation
From a systemic perspective, identifying inter-relationships and inter-dependencies among stakeholders' segments was important in developing an understanding of power dynamics that would affect the policy change process. For example, the MOH is a physician-led institution where doctors maintain a strong network of influence across public and private sectors, and this might explain the reluctance of the MOH decision makers to engage in an overt conflict with the JSOG.

8. Methods mix
The intervention used a combination of systems' diagramming tools, for example, rich pictures and system maps, policy briefs, and semi-guided group discussions.

## SSM Intervention's Results

The outcome of this SSM cycle was the production of an amended midwifery law that the Minister of Health has endorsed and submitted to the Parliament. Thus, the intervention-level objectives were achieved. At the context level, the SSM process has contributed to creating new coalitions which influenced policymakers' behavior toward initiating a midwife-led model by modifying the legislative framework of the midwifery profession. The SSM principle of acknowledging different worldviews supported an inclusive process of policy dialogue.

However, the JSOG remained opponent to the amendments that have been endorsed by the Legislative Bureau. Borrowing Checkland and Poulter's (2010) metaphor of power as "a commodity" (p. 217), it appears that private gynecologists obtain their power from their social status as uncontested experts in maternal health. In this context, they used this power to protect their profession's interests which they perceived being threatened by midwives' enhanced practice. Their peers in the MOH defend this power that also benefits their status in the public sector. This power might fade over time with the implementation of the amended law. However, at this early stage of incomplete accommodation with the JSOG, private gynecologists' power is still sufficient to hinder the law's implementation.

Checkland and Poulter (2010) highlight that SSM is an iterative cycle toward a situation's improvement as "the flux of events and ideas" changes constantly (p. 191). At the policy implementation stage, midwives and gynecologists will have to collaborate to design the referral system, contribute to midwives' training and academic programs, and balance power dynamics in their professional relationship. This requires follow-on SSM cycles that would ultimately seek to evolve from provider-led models—either physician or midwife—toward a patient-centered care system respectful of women's needs, values, and preferences.

An analysis of the SSM cycle in Table 1 was helpful to examine the extent of its compatibility with social marketing interventions.

## Conclusions

Acknowledging the cultural and political complexity of upstream social marketing interventions and the uncertainty pertaining to any human behavior, we have attempted to open the boundaries of traditional social marketing frameworks and introduce systems thinking through the practice of SSM. In this case study, we have found that SSM was effective in reducing policymakers' behavioral barriers, which were due mainly to the fear of an unknown maternal healthcare paradigm where midwives would be empowered.

However, private gynecologists are seemingly negatively affected by the new midwifery system, which raises the ethical issue of fairness and the practical issue of feasibility of the amended law with the gynecologists' lobby opposing it. SSM addresses such issues by the iterative cycles of learning and reflection on perspectives that have emerged from previous iterations. Hence, circling back to the JSOG to reach a new accommodation level was recommended.

We have valued SSM's ability to surface worldviews during stakeholders' discussions, bringing a liberating authenticity in the exchanges. For example, representatives from the RMS could genuinely declare to "have learned everything" with midwives about prenatal and neonatal care. Hence, confirming Checkland and Poulter's (2010) observation, our "rough-and-ready use of SSM [has improved] the quality of thinking of the participants and increased the quality of the discussion which they generate" (p. 240). Consequently, with each stakeholder starting to "see the world through the eyes of another" (Churchman, 1968, p.231), mutual defenses began to lower and a collaborative behavior started to emerge.

We have also appreciated the practicality of Checkland and Poulter's (2010) advice that SSM "should be treated for what it is, *a set of principles which need to be tailored to a method for this*

*situation with these participants*, *with their history, now*" (p. 240, our emphasis). This methodological flexibility has eased SSM blending in an upstream social marketing intervention.

This case study demonstrates the relevance and practicality of combining a systems tool with social marketing frameworks for an effective emergence of intended behavioral outcomes. The contextual complexity of social marketing programs invites social marketers to shift toward a systemic social marketing praxis, that is, a systems thinking informed social marketing practice enacting reflective and reflexive thinking. Being reflective, social marketers would question their methodological designs, take responsibility for their frameworks, and develop a response-ability to adapt their tools in constantly changing contexts. Being reflexive, they would question "what they do when they do what they do" (Ison, 2017, p.5), thus become more aware of their own methodological preferences and more capable to widen the boundary of their traditional toolbox to include new methods and/or adapt old ones. This experience therefore invites to further practice of systems approaches to accompany social marketing frameworks when engaging with the complexity of culturally and politically loaded upstream interventions.

Regarding social marketing as a community of practice, systemic ways of doing social marketing might contribute to answering the question that Fox and Kotler asked in 1980: "What is the future of Social Marketing?" (1980, p.24) We suggest that social marketers' capacity to avoid "the traps of reductionism and dogmatism" (OU, 2012, p. 23) and "the trap of reification" (Ison, 2017, p. 129) would contribute to the sustainability of social marketing as a living and resilient praxis. Recognizing that behavior change is more complex and uncertain than a linear cognitive process toward pre-set behavioral targets would help social marketers escape the trap of systematic linear thinking and reductionism. Welcoming perspectives and methodologies from other disciplines such as systems (systemic + systematic) thinking would counter the trap of dogmatism. Finally, we might reflect on our own practice as social marketers and avoid the trap of reification by regenerating social marketing approaches and tools in order to sustain the immutable purpose of the social marketing system, that is, "improving individual and social well-being" (International Social Marketing Association, 2014).

## Authors' Note

This case study was developed based on a policy intervention of the Jordan Communication Advocacy and Policy (JCAP) Project funded by the United States Agency for International Development (USAID).

## Acknowledgments

We thank Dr. Carlos J. Cuéllar, Vice President at Abt Associates Inc. (Rockville, MD, USA) and JCAP Director, for his feedback. We are grateful to Dr. Ray L. Ison, Professor of Systems at The Open University and President of the International Federation for Systems Research (IFSR) for his review and insights.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## ORCID iD

Houda A. Khayame https://orcid.org/0000-0002-5649-907X

## References

Abushaikha, L. (2006). Midwifery education in Jordan: History, challenges and proposed solutions. *Journal of International Women's Studies*, *8*(1), 185–193.

Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, *1* (1), 7–24.

Brychkov, D., & Domegan, C. (2017). Social marketing and systems science: past, present and future. *Journal of Social Marketing*, *7* (1), 74–93.

C-Change. (n.d.). SBCC theories and models. https://www.c-changeprogram.org/focus-areas/capacity-strengthening

Checkland, P., & Poulter, J. (2006). *Learning for action: A short definitive account of soft systems methodology and its use, for practitioners*. Teachers and Students. John Wiley and Sons Ltd.

Checkland, P., & Poulter, J. (2010). Soft systems methodology. In M. Reynolds & S. Holwell (Eds.), *Systems approaches to managing change: A practical guide*, (pp. 191–242). Springer London in association with The Open University.

Churchman, C. W. (1968). *The systems approach*. Delta/Dell Publishing.

French, J. (2011). Why nudging is not enough. *Journal of Social Marketing*, *1*(2), 154–162.

Confederation of Midwives. (2011). *Global standards for midwifery regulation*. https://www.internationalmidwives.org/assets/files/general-files/2018/04/global-standards-for-midwifery-regulation-eng.pdf

French, J. (2014). Up-stream, mid-stream and down-stream social marketing. Defining the term. https://www.linkedin.com/pulse/20140819142011-50216498-up-stream-mid-stream-and-down-stream-social-marketing-defining-the-term/

French, J., & Gordon, R. (2015). *Strategic marketing*. Sage.

Gordon, R. (2013). Unlocking the potential of upstream social marketing. *European Journal of Marketing*, *47*(9), 1525–1547.

Government of Jordan. (1959). Midwifery Law (7) for the year 1959. https://qistas.com/legislations/jor/view/80852

Government of Jordan. (2018). Health and Medical Accountability Law (25) for the year 2018. http://www.adaleh.info/Art.aspx?Typ=2&Id=1194

International Social Marketing Association. (2014). Social marketing vision. https://www.i-socialmarketing.org/index.php?option=com_content&view=article&id=26:social-marketing-vision&catid=20:about&Itemid=111#.Xai9K-hKjyE

Ison, R. (2017). *Systems practice. How to act in a climate-change world*. Springer.

Ison, R. L., Collins, K. B., & Wallis, P. J. (2015). Institutionalising social learning: Towards systemic and adaptive governance. *Environmental Science & Policy*, *53*, 105–117. https://doi.org/10.1016/j.envsci.2014.11.002

Jordan Communication Advocacy and Policy. (2015). *Knowledge, attitudes and practices (KAP) of family planning in Jordan: quantitative survey in 8 governorates*. Team International.

Jordan Communication Advocacy and Policy. (2017a). *Legal review of Jordan Midwifery Law #7 of year 1959*. Imam, N.

Jordan Communication Advocacy and Policy. (2017b). *Situation analysis of midwifery*. Majali, S.

Jordan Communication Advocacy and Policy. (2017c). *Midwifery education*. Majali, S.

Jordan Communication Advocacy and Policy. (2018). *Literature review, midwifery legislation: France, the U.S., New Zealand, and the U.K*. Taub, L.

Jordan Department of Statistics. (2017). *Jordan Population and Family Health Survey 2017-18, key indicator report*. http://www.dos.gov.jo/dos_home_a/main/linked-html/DHS2017_en.pdf

Jordan Department of Statistics. (2017–2018). *Jordan population and Family Health Survey*. https://dhsprogram.com/pubs/pdf/FR346/FR346.pdf

Jordan Ministry of Health. *(*2017). *Annual statistical report*. www.moh.gov.jo/

Jordan Nursing Council. (2016a). Midwifery, scope of practice, professional standards and competencies. http://www.jnc.gov.jo/Documents/National%20Framework%20for%20Midwifery%20Practice%202016.pdf

Jordan Nursing Council. (2016b). Bylaws #85 for the year 2016. http://jnc.gov.jo/Documents/%d9%86%d8%b8%d8%a7%d9%85%20%d8%a7%d9%84%d8%a7%d8%ae%d8%aa%d8%b5%d8%a7%d8%b5%20%d9%88%d8%a7%d9%84%d8%aa%d8%b5%d9%86%d9%8a%d9%81%20%d8%a7%d9%84%d9%81%d9%86%d9%8a%20%20%d9%81%d9%8a%20%d9%85%d9%87%d9%86%d8%a9%20%d8%a7%d9%84%d8

%aa%d9%85%d8%b1%d9%8a%d8%b6%20%d9%88%d8%a7%d9%84%d9%82%d8%a8%d8%a7%d9%84d8%a9%20%d8%b1%d9%82%d9%85%2085%20%d9%84%d8%b3%d9%86%d8%a9%202016.pdf

Jordan Nursing Council. (2018). *Letter to the secretary general of the Jordan nursing council*. Jordan Obstetrician and Gynaecology Society.

Kennedy, A. (2016). Macro-social marketing. *Journal of Macromarketing*, *36*(3), 354–365.

NSMC. (n.d.). Social marketing benchmark criteria. https://www.culturehive.co.uk/wp-content/uploads/2014/01/51.-Benchmark-criteria-NSMC.pdf

The Open University. (2012). *TU811 Thinking strategically: Systems tools for managing change - study guide*. The Open University.

Rifai, R. (2014). Rising cesarean deliveries among apparently low-risk mothers at university teaching hospitals in Jordan: Analysis of population survey data, 2002–2012. *Global Health: Science and Practice*, *2*(2), 195–209. https://doi.org/10.9745/GHSP-D-14-00027

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, *4* (2), 155–169.

Ulrich, W., & Reynolds, M. (2010). Critical systems heuristics. In M. Reynolds & S. Holwell (Eds.), *Systems approaches to managing change: A practical guide*, (pp. 243–292). Springer London in association with The Open University.

United Nations Fund for Population Activities (UNFPA). (2014). *State of the world's midwifery report*. https://www.unfpa.org/sowmy

Varrica, M. (2017). What is systems thinking in social marketing? https://mvdrinkstea.wordpress.com/2017/11/21/what-is-systems-thinking-in-social-marketing/

World Health Organization. (2020). Quality midwifery care for mothers and newborns. https://www.who.int/maternal_child_adolescent/topics/quality-of-care/midwifery/en/

## Author Biographies

**Houda A. Khayame** is a systems practitioner in international development, with over 20 years of experience in social marketing, behaviour change communication, advocacy and policy. She has contributed to women and children's health, environment and education projects with USAID, WHO and UNDP in the Middle-East and North-West Africa. Her PhD research with the Open University focuses on the institutionalisation of systemic models of governance of the Anthropocene in a context of the global warming emergency.

**Mona M. Abdeljawad** has more than 20 years of experience managing human rights and development projects in Jordan and the Arab Region including health, disability rights, education, women economic empowerment, and advocacy campaigns. Since January 2020, she is the Director of a USAID project in Jordan for community health and nutrition. Mona holds a Master's degree in International Human Rights Law from the University of Oxford, and pursues studies in Behavioural Economics towards a MSc with the London School of Economics.